

-2-

The first and the second anti-static layers 41 and 44 can also [be] formed of PET (polyethylene terephthalate) or LLD (linear low-density polyethylene), as well as PE, mixed with a charge protective material. ('860 patent at column 7, lines 42-45; emphasis added.)

Moreover, again not disputed by the Examiner, the '860 patent teaches that layer 41 can contain a variety of other additives:

When necessary, an anti-blocking agent or a slipping agent can be added to the polymer forming the first and second anti-static layers 41 and 44.... ('860 patent at column 7, lines 49-52)

Similarly, there is no dispute between the Examiner and applicants that:

(1) the '860 patent's preferred material for layer 41 is polyethylene (see the '860 patent at column 7, lines 35-37 -- "The first anti-static layer 41 and the second anti-static layer 44 each have a thickness of about 30 μ m and are formed of PE and an anion surfactant kneaded thereto."), and

(2) applicants found (see samples 6 and 7 of applicants' Table 1) that polyethylene produces film residuals which cannot "be washed away from glass substrates through a physical washing process only" (i.e., polyethylene produces a dirtying film as opposed to a non-dirtying film of the type called for by applicants' independent Claim 1 and thus each of dependent Claims 2-8).

Along these same lines, the Examiner does not dispute that applicants also found that when it comes to dirtying, seemingly slight changes to a film can transform a non-dirtying film into a dirtying film as evidenced by applicants' data which shows that biaxially-oriented polypropylene film from the vendor Touyoubouseki (sample 4 of applicants' Table 1) "achieved surface clearness as good as that of the PET films" (applicants' specification at page 11, line 30, - page 12, line 1), while biaxially-oriented polypropylene film from the vendor Futamurakagakukougyou (sample 5 of applicants' Table 1), "only achieved surface clearness at the same level as those of the polyethylene films" (applicants' specification at page 12, lines 1-3).

-3-

Although there is agreement on the above, there is disagreement on the following:

(1) The Examiner's assertion that "it would be reasonable to think that one having ordinary skill in the art would consider the cleanliness of an LCD glass substrate in a finished electronic product to be shipped or sold just as much as in the shipping or selling of a glass substrate alone." (9/11/06 Office Action at pages 3-4; emphasis added.)

(2) The Examiner's assertion that "the film of the '860 patent (i.e., PET; see column 7, lines 42-43) is capable of not dirtying the glass surface in as much as Applicant discloses that PET is a sufficient film material for solving that particular problem." (9/11/06 Office Action at page 3.)

(3) The Examiner's assertion that it is applicants' burden to provide "proof that PET combined with a charge protective material/anti-blocking agent/slip agent will dirty the glass substrate" (9/11/06 Office Action at page 3), as opposed to the Examiner's burden to provide evidence or scientific reasoning why PET will continue to be non-dirtying when so modified.

As to point of dispute (1), there are significant differences in the level of cleanliness needed for LCD substrates as opposed to finished electronic products which contain LCD substrates. As their name implies, LCD substrates serve as substrates for sophisticated manufacturing processes in which a thin film transistor (TFT) array or a color filter array is produced directly on a substrate using, for example, photolithographic techniques. The cleanliness of the substrate is of utmost importance in such processes, with dirty areas easily resulting in defective pixels in the finished display.

However, once a substrate is embedded in a finished display, the cleanliness levels needed are the ordinary ones associated with any electronic device, whether or not the device internally contains an LCD substrate. For example, the packaging for a finished display should keep it from picking up warehouse and shipping dust and dirt which would be objectionable to the purchaser.

-4-

In this regard, it is significant that neither the word "clean" nor the word "dirty" appears anywhere in the '860 patent since that it is not the problem the reference is concerned with. Rather, the reference addresses the static electricity problem wherein transistors, whether in an LCD display, an electronic memory, or the like, are destroyed by the sparks generated when electronic devices are removed from plastic bags. It is for this reason that the '860 patent's preferred film material can be polyethylene, a material which applicants found consistently dirties LCD substrates.

As to point of dispute (2), applicants do not concede that their data in any way leads to the conclusion that the '860 patent discloses a PET film that "is capable of not dirtying the glass surface," as asserted by the Examiner. The '860 patent's film unquestionably contains a "charge protective material" and may contain "an anti-blocking agent or a slipping agent." Applicants' data is for PET as provided by various vendors, not PET which has been modified with the additives of the '860 patent.

It is thus pure speculation for the Examiner to assert that the reference's PET film, after such modification, "is capable of not dirtying the glass surface." The Examiner offers no evidence or scientific reasoning why this should be the case and, as applicants' work with biaxially-oriented polypropylene shows, the opposite assumption, i.e., that these materials make the PET dirtying, is the one that is reasonable.

Finally, as to the third point of disagreement (who has the burden of proof), the law is very clear that it is the Examiner who bears the initial burden of proof and that until that burden has been met, the applicant does not have to prove anything.

Thus, as discussed by the Board in Ex parte Skinner, 2 U.S.P.Q.2d 1788, 1788-9 (Bd. Pat. App. & Interfer. 1986):

It is by now well settled that the burden of establishing a *prima facie* case of anticipation resides with the Patent and Trademark Office. *In re Piasecki*, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984) quoting *In re Warner*, 379 F.2d 1011, 1016, 154 USPQ 173, 177 (CCPA 1967). It is the examiner's position that the mold of Mizutani may inherently have the characteristics of the claimed mold. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient. *In re Oelrich*, 666 F.2d 578, 581, 212

-5-

USPQ 323 (CCPA 1981). We are mindful that there is a line of cases represented by *In re Swinehart*, 439 F.2d 210, 169 USPQ 226 (CCPA 1971) which indicates that where an examiner has reason to believe that a functional limitation asserted to be critical for establishing novelty in the claimed subject matter may, in fact, be an inherent characteristic of the prior art, the examiner possesses the authority to require an applicant to prove that the subject matter shown to be in the prior art does not possess the characteristic relied on. Nevertheless, before an applicant can be put to this burdensome task, the examiner must provide some evidence or scientific reasoning to establish the reasonableness of the examiner's belief that the functional limitation is an inherent characteristic of the prior art. In the case before us, no such evidence or reasoning has been set forward. (Italics in original; emphasis added.)

A similar discussion of the applicable law appears in *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1463-4 (Bd. Pat. App. & Interfer. 1990):

[T]he initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention rests upon the examiner. *In re Piasecki*, 745 F.2d 1468, 223 USPQ 785 (Fed. Cir. 1984). In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic *necessarily* flows from the teachings of the applied prior art. *In re King*, 801 F.2d 1324, 231 USPQ 136 (Fed. Cir. 1986); *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983); *In re Oelrich*, 666 F.2d 578, 212 USPQ 323 (CCPA 1981); *In re Wilding*, 535 F.2d 631, 190 USPQ 59 (CCPA 1976); *Hansgirk v. Kemmer*, 102 F.2d 212, 40 USPQ 665 (CCPA 1939). In our opinion, the examiner has not discharged that initial burden. (Italics in original.)

Applied to the facts of this case, the foregoing precedent means that applicants do not have to prove that "PET combined with a charge protective material/anti-blocking agent/slip agent will dirty the glass substrate," as alleged by the Examiner, but rather, the Examiner must provide reasons why PET when combined with these materials will remain non-dirtying. The Examiner has not provided a single reason why this should be the case.

-6-

In view of these considerations, applicants respectfully submit that the Examiner's §102 rejection based on the '860 patent is not in keeping with the law or the facts of this case. Accordingly, applicants request reconsideration and withdrawal of the rejection and the issuance of a notice of allowance for this application.

Respectfully submitted,

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